Various features of the invention are set forth in the following claims:

What is claimed is:

1. A contact lens for correction of presbyopia having a generally spherical anterior surface; and

a posterior side including an annular spherical surface which is an outer residual portion of a spherical base curve generally matched in radius of curvature to a portion of the cornea over which said spherical surface lies and a central generated aspherical surface extending from the center of said posterior side substantially beyond the diameter of the pupil,

said generated surface being generated into said base curve by a continuous operation beginning at the center of the original base curve removing continuously less material from the center outward,

said generated surface having a central portion which optically cooperates with said anterior surface to provide an appropriate diopter correction for distance vision; and

a paracentral portion of said generated aspherical surface around said central portion having progressively increasing radii of curvature and decreasing eccentricities away from the center, said paracentral portion cooperating with said anterior surface to provide a gradient of appropriate diopter add for close-in and intermediate viewing;

said annular spherical surface and a portion of said generated polished surface beyond said paracentral portion fitting closely adjacent the cornea.

2. A contact lens in accordance with claim 1 wherein said generated surface beyond about 16° to about 20° from the center of said lens has eccentricity values below about 0.6.

3. A contact lens in accordance with claim 1 wherein a portion of said paracentral portion from about 5° to about 12° from the center of said lens has eccentricity values greater than about 1.0.

4. A contact lens in accordance with claim 1 wherein said annular spherical surface is at least about 0.7 mm wide.

5. A contact lens for correction of presbyopia having;

a generally spherical anterior surface; and

a posterior surface having;

a central portion extending from about 3° to about 5° from the center of said lens which optically cooperates with said anterior surface to provide an appropriate diopter correction for distance vision;

a paracentral portion disposed beyond said central portion and extending at about 16° to about 20° from the center of said lens, said paracentral portion having increasing radii of curvature and decreasing eccentricities away from the center and which optically cooperates with said anterior surface to provide a gradient of appropriate diopter add for close-in and intermediate viewing, that portion of said paracentral portion between about 5° and about 12° from the center of said lens having eccentricities greater than 1; and

an annular fitting portion beyond said paracentral portion which generally parallels the corneal surface over which it lies, said fitting portion having eccentricity values below about 0.6.

6. A contact lens in accordance with claim 5 wherein said fitting portion includes an annulus at least about 0.7 mm wide having a spherical configuration.

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